



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/617,083

07/10/2003

Pei-Yuan Lee

3507.2.11

3375

21552 7590 01/29/2009  
AUSTIN RAPP & HARDMAN  
15 WEST SOUTH TEMPLE  
SUITE 900  
SALT LAKE CITY, UT 84101

EXAMINER

LANDRUM, EDWARD F

ART UNIT

PAPER NUMBER

3724

MAIL DATE

DELIVERY MODE

01/29/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* PEI-YUAN LEE

---

Appeal 2008-6313  
Application 10/617,083  
Technology Center 3700

---

Decided: January 29, 2009

---

Before WILLIAM F. PATE, III, LINDA E. HORNER, and  
KEN B. BARRETT, *Administrative Patent Judges*.

BARRETT, *Administrative Patent Judge*.

DECISION ON APPEAL  
STATEMENT OF THE CASE

Pei-Yuan Lee (Appellant) seeks our review under 35 U.S.C. § 134 from a final rejection of claims 16-18 and 20-26. We have jurisdiction under 35 U.S.C. § 6(b).

## SUMMARY OF THE DECISION

We AFFIRM.

### THE INVENTION

Appellant's claimed invention pertains to an apparatus for punching an article such as a stack of papers. (Spec. 1, ¶ [0001].) The apparatus includes a main body which exerts a punching force on the article, a levering rod with a bent portion, and a roller bearing for transmitting the externally imparted depressing force to the main body. (*See, e.g.*, claim 16; Spec. 4, ¶ [0014].) According to the Appellant, the configuration of the levering rod allows the apparatus to have a longer levering rod without increasing the height or volume of the apparatus. (Spec. 7, ¶ [0026].) Claim 16, reproduced below, is representative of the subject matter on appeal.

16. A punching apparatus for punching holes in an article, comprising:

- a main body for receiving therein said article and configured to be depressed in a levering action to exert a punching force on said article to punch holes;

- a roller bearing for transmitting a depressing force to said main body by depressing said main body to provide said punching force in response to an external force; and

- a non-linear levering rod comprising a force-receiving portion for being applied thereonto said external force, a pivot portion coupled to said main body for allowing said levering rod to pivot relative to said main body in response to said external force, a bent portion connected to said force-receiving portion and said pivot portion, wherein the levering rod is substantially linear between the pivot portion and the bent portion and wherein the levering rod is substantially linear between the force-receiving portion and the bent portion and wherein the levering rod between the force-receiving portion and the bent portion is kept at a substantially horizontal level in a rest state, a depressing-force exerting portion disposed only

between said pivot portion and said bent portion and coupled to said roller bearing for transmitting said roller bearing to move, said non-linear leveraging rod transmitting said roller bearing to depress said main body while moving in response to said external force.

### THE REJECTION

The Examiner relies upon the following as evidence of unpatentability:

Brennan	US 2,149,268	March 7, 1939
Van Cleave	US 3,890,870	June 24, 1975
Mori	US 4,466,322	Aug. 21, 1984

The rejection before us for review is the Examiner's rejection of claims 16-18 and 20-26 under 35 U.S.C. § 103(a) as unpatentable over Brennan in view of Van Cleave or, alternatively, Mori.

### ISSUE

The issue before us is whether the Appellant has shown that the Examiner erred in rejecting claims 16-18 and 20-26 as unpatentable over Brennan in view of Van Cleave or, alternatively, Mori. This issue turns on whether the references disclose all of the limitations of claim 16.

### FINDINGS OF FACT

We find that the following enumerated findings are supported by at least a preponderance of the evidence.

1. Brennan discloses a perforating device for punching holes in sheets of paper. (Brennan 1, col. 1, ll. 1-5, 15-18.) Brennan's device has a main body that includes a base 11, punch 24, and bottom wall 18. (Brennan

2, col. 1, ll. 17-36.) Brennan's main body receives the paper to be punched and is configured to be depressed in a levering action to exert a punching force on the paper. (*Id.*)

2. Brennan also teaches a non-linear levering rod 27, 28 with a pivot portion (at pin 29) coupled to the main body. (Brennan 2, col. 1, ll. 21-24; Fig. 8.)

3. Brennan teaches a roller bearing 32 for transmitting a depressing force to the main body by depressing the punch in response to an external force. (Brennan 2, col. 1, ll. 24-31.)

4. Brennan's roller bearing 32 is mounted on pin 31 that is attached to the levering rod. (Brennan 2, col. 1, ll. 24-25; Fig. 8.) The pin 31 transmits the applied external force to the roller bearing which, in turn, transmits the force to the punch. (*See id.* 2, col. 1, ll. 24-31; Fig. 8.) Therefore, the portion of the levering rod at pin 31 is the depressing-force exerting portion.

5. Figure 8 of Brennan is reproduced below.

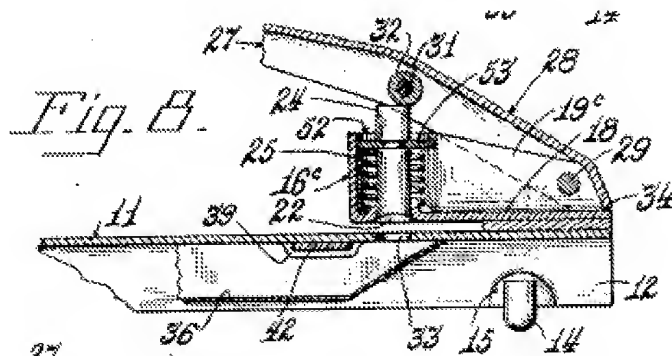


Figure 8 shows an embodiment of Brennan's device in which the levering rod 27, 28 is bent. In this embodiment, the bent portion of the rod is slightly to the left of the pin 31. The pivot portion in Brennan's figure 8 (at pin 29) is to the right of the pin 31. Therefore, Brennan discloses a depressing-force

exerting portion of the levering rod disposed only between the pivot portion and the bent portion.

6. Van Cleave teaches a levering rod in which the section 74 between the force-receiving portion and the bent portion is kept at a substantially horizontal level in a rest state. (Van Cleave, col. 3, ll. 12-15, Fig. 1.)

7. Mori teaches a handle 5 which is kept at a substantially horizontal level in a rest state. (Mori, col. 4, ll. 17-20; Fig. 11.) Mori further teaches that the handle is maintained “substantially in parallel to the base member 1, thereby making the punch as a whole compact when it is, for example, transported.” (*Id.*, col. 4, ll. 40-43.)

#### PRINCIPLES OF LAW

We determine the scope of the claims in patent applications by giving the claims “their broadest reasonable interpretation consistent with the specification” and by reading the claim language “in light of the specification as it would be interpreted by one of ordinary skill in the art.” *In re Am. Acad. Of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004) (citations omitted). We must be careful not to read a particular embodiment appearing in the written description into the claim if the claim language is broader than the embodiment. *See Superguide Corp. v. DirecTV Enterprises, Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004).

“Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said

subject matter pertains.” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1734 (2007) (quoting 35 U.S.C. § 103). The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17-18 (1966); *see also KSR Int’l Co.*, 127 S. Ct. at 1734 (“While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.”).

#### ANALYSIS

Appellant argues the rejected claims as a group. (*See* Appellant’s Amended Appeal Brief dated July 31, 2007 (App. Br.) 4; *see also id.* 7, 10 (referring generally to “the claimed invention.”)) We select claim 16 as the representative claim, and claims 17-18 and 20-26 stand or fall with claim 16. 37 C.F.R. § 41.37(c)(1)(vii).

Claim 16 recites a non-linear levering rod with “a depressing-force exerting portion disposed only between said pivot portion and said bent portion and coupled to said roller bearing[.]” We understand Appellant to argue that the combined references lack this structure. (*See* App. Br. 5-7.)

Brennan discloses a depressing-force exerting portion at the location of the pin upon which the roller bearing is mounted. (Fact 4.) Appellant’s Specification indicates that the claimed “bent portion” is the point where two linear sections of the levering rod intersect. (*See* Spec. 6, ¶ [0025]; Fig. 2(c) (showing dimensions d2 and d3 both measured from point D); *see also* Fig. 2(a).) In the embodiment shown in figure 8 of Brennan, the bent portion of

the rod is slightly to the left of the roller pin. (Fact 5.) The pivot portion in Brennan's figure 8 is to the right of the roller pin. (*Id.*) Thus, Brennan does disclose the recited depressing-force exerting portion disposed only between the pivot portion and the bent portion, and the depressing-force exerting portion coupled to the roller bearing. (Facts 4, 5.)

Appellant, arguing that Brennan's roller is coupled to the bent portion, refers to certain sections of Brennan's specification and "the relevant figures in Brennan." (App. Br. 5 (citing Brennan 2, col. 1, ll. 17-36; *id.*, col. 2, ll. 29-40)). Appellant does not explain, and it is not readily apparent, how those sections of Brennan's specification and the "relevant figures" support Appellant's position.

Appellant asserts that Brennan has a "serious drawback." (App. Br. 5.) Appellant speculates that Brennan's handle may break at the bent portion in a hypothetical situation involving excessive external applied force and a handle made of plastic. (*Id.*) However, a propensity for Brennan's handle to break at the bent portion does not negate Brennan's disclosure of the claimed structure.

Appellant quotes from the Specification's description of exemplary levering rod dimensions and the "effectively increased" leverage. (App. Br. 6.) Appellant appears to contend that the exemplary configuration is "inventive structure" not taught by the prior art. (App. Br. 6-7.) Appellant's contention is not commensurate in scope with claim 16, which does not require the quoted dimensions or any corresponding increase in leverage.

Appellant, referring to Figure 2(a) of the Specification, also asserts that "in the claimed invention the punching line is parallel to the non-linear rod." (App. Br. 7.) Appellant argues that this structure is not taught or



suggested by any of the cited references or the combination thereof. (App. Br. 10.) This argument is not persuasive. Claim 16 does not contain language requiring a punching line parallel to the non-linear rod, and we decline to read the configuration of the depicted embodiment into the claim.

As to the Van Cleave and Mori references, Appellant does not assert error in the Examiner's findings regarding a levering rod kept at a substantially horizontal level in a rest state (*see* Ans. 3-4). Appellant also does not assert error in the Examiner's rationales supporting the combination of the references.

Appellant has failed to persuade us of error in the Examiner's conclusion of obviousness of claim 16, and claims 17, 18 and 20-26, which fall with claim 16.

### CONCLUSION

We conclude that the Appellant has failed to show that the Examiner erred in rejecting claims 16-18 and 20-26 under 35 U.S.C. § 103(a) as unpatentable over Brennan in view of Van Cleave or, alternatively, Mori.

### DECISION

The decision of the Examiner to reject claims 16-18 and 20-26 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED

Appeal 2008-6313  
Application 10/617,083

JRG

AUSTIN RAPP & HARDMAN  
15 WEST SOUTH TEMPLE  
SUITE 900  
SALT LAKE CITY, UT 84101